

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

84



UNITED STATES PATENT AND TRADEMARK OFFICE

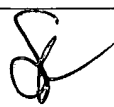
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/878,859	06/11/2001	Simon Lok	AP33285	2657
21003	7590	08/13/2004	EXAMINER	
BAKER & BOTTS 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			YIGDALL, MICHAEL J	
			ART UNIT	PAPER NUMBER
			2122	

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

84

Office Action Summary	Application No. 09/878,859	Applicant(s) LOK ET AL. 	
	Examiner Michael J. Yigdoll	Art Unit 2122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is in reply to Applicant's response and amendment dated April 29, 2004. Claims 1-20 remain pending.

Response to Arguments

2. Applicant's arguments have been fully considered but they are not persuasive.
3. In response to Applicant's arguments that the references fail to show certain features of Applicant's invention, it is noted that the features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Specifically, Applicant contends that Muta neither discloses nor suggests that mouse movement and/or keystrokes are tied to any particular graphical component on the display, e.g. whether the mouse or keyboard actuates a graphical component, button, menu item, etc. (page 13, paragraph 3). Claim 1, as amended, does not recite such features, but rather recites the limitation, "wherein said component is related to user interaction, and to generate an event coupled to said component in response to user interaction with said component." The remote controlling software of Muta (see column 2, lines 36-44), which has a an event monitor, i.e. a component related to user interaction, and an event sender, i.e. for generating events coupled to the monitor in response to user interaction, anticipates this limitation.

Moreover, Muta does show that mouse and keyboard input is associated with particular graphical components on the display (see FIG. 2 in view of FIG. 8). For example, first the user

Art Unit: 2122

clicks the “Start” button shown in FIG. 2, then the master applet 215 responds to that input and generates an event to actuate the button on the server, and finally the respective function of the button click is performed on the remote client, as shown in FIG. 8. Likewise, a similar sequence occurs when the mouse is moved to the “Program” menu shown in FIG. 2.

Applicant further contends that Muta neither discloses nor suggests providing a remote-capable user interface toolkit on the server by creating a remote-capable component, which is configured to interact with the application according to the API, and which is configured to generate a message to the component on the remote client to perform the respective function on the remote client, such that the respective function is only performed on the remote client (page 13, paragraph 4). The limitation, “such that the respective function is only performed on the remote client,” is not recited in the claims. Applicant suggests that claim 1 has been amended accordingly (page 14, paragraph 2), but this does not appear to be the case.

4. Applicant contends that Muta neither discloses nor suggests a remote-capable user interface toolkit to interact with the application according to the API, as recited in claim 1 (page 14, paragraph 1). However, Applicant acknowledges the slave daemon 247 disclosed by Muta (see FIG. 8). The slave daemon equates to the remote-capable interface toolkit because it interacts with an application by way of hooks and window messages, or in other words, by way of an application programming interface (see column 10, lines 56-67). This has been clarified in the claim rejections below.

Applicant further contends that Muta neither discloses nor suggests invoking the remote-capable user interface toolkit by the application to perform a function according to the API (page 14, paragraph 3). However, the application inherently invokes the slave daemon (the remote-

Art Unit: 2122

capable user interface toolkit) by responding to the input and calling the corresponding drawing functions of the API (see column 10, lines 56-67 and column 11, lines 13-21). If the slave daemon and the components therein were not invoked by the application, the drawing commands would not and could not be sent from the server to perform the respective function on the remote client, as shown in FIG. 8.

Applicant similarly contends that Muta neither discloses nor suggests generating the message by the remote-capable component of the remote-capable user interface toolkit on the server in response to the invocation by the application, the message being a command to the user interface toolkit on the remote client to perform the function (page 14, paragraph 4). However, Muta does teach generating messages, in the form of drawing commands, to send to the remote client to perform the respective function (see column 11, lines 29-62), in response to invocation by the application, as explained above.

Applicant further contends that Muta neither discloses nor suggests a step of generating an event by the remote-capable component of the remote-capable user interface toolkit in response to the step of invoking, as recited in claim 6 (page 15, paragraph 2). Again, the application invokes components of the slave daemon (the remote-capable user interface toolkit), which in turn generates drawing commands, or in other words, events, to send to the remote client. This has been clarified in the claim rejections below.

5. In response to Applicant's argument that there is no suggestion to combine the references (page 16, paragraph 2), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references

Art Unit: 2122

themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to combine Muta and Thomas is to improve throughput and availability, which is taught by Thomas (see column 2, lines 61-65), and which was cited in the previous Office action (page 7, bottom and page 9, top).

Applicant alleges that no indication has been provided as to why one skilled in the art, seeking to improve throughput and availability of a graphical system (Muta), would look to an online search engine (Thomas) for such an improvement (page 16, paragraph 2). It is respectfully noted that Applicant refers to a “Smith” reference, where the intent may have been Thomas. Nonetheless, the “graphical system” of Muta is in fact a distributed system having a server and a remote client (see FIG. 2). Applications on the server are remotely controlled through the browser on the client (see FIG. 4). Likewise, the “online search engine” of Thomas is also a distributed system (see FIG. 2), wherein the server has an application for searching the World Wide Web, and the remote client has a browser for interacting with the application (see column 2, lines 37-51). The system is distributed such that the application executes on the server and the remote client provides the user interface, thereby allowing greater throughput and availability of the system as a whole (see column 2, lines 61-65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Muta and Thomas to improve the throughput and availability of an application, such as the database searching application taught by Thomas, by implementing the application within the distributed server and remote client system disclosed by Muta. The throughput of the system would be further improved by reducing the quantity of data exchanged

between the server and the remote client, as taught by Muta (see column 2, lines 15-19).

Clarification has been provided in the claim rejections below.

6. In response to Applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981) and *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Specifically, Applicant contends that Muta and/or Cohen neither disclose nor suggest substituting the portion of the code relevant to executing the function with the portion of code configured to issue the remote command to execute the function, as recited in claim 9 (page 16, paragraph 4). However, Muta discloses substituting the normal flow of the graphics engine and display driver, i.e. the portion of code relevant to executing the function, with a component that issues drawing commands to the remote client to execute the respective function (see column 11, lines 7-12). Although Muta does not expressly disclose this in terms of generating code, Cohen discloses generating code automatically to distribute an application between a server and a remote client (see column 3, lines 11-43). Therefore, in combination, Muta and Cohen teach the recited limitation.

Specification

7. The objections to the abstract of the disclosure and the specification are withdrawn in view of Applicant's amendments.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-6 and 10-20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,286,003 to Muta (art of record; herein “Muta”), as set forth in the Office action mailed December 29, 2003.

With respect to claim 1 (currently amended), Muta discloses a method for distributed processing through a server and a remote client wherein an application is executed entirely in the server (see FIGS. 2 and 8, and column 1, lines 56-60), wherein the application is configured to interact with a user interface toolkit according to an application programming interface (see column 11, lines 13-21), and wherein the user interface toolkit has a component that performs a function (see column 2, lines 45-54), the method comprising:

(a) providing the user interface toolkit on the remote client such that the component is configured to perform the function on the remote client, wherein said component is related to user interaction, and to generate an event coupled to said component in response to user interaction with said component (see master applet 215 in FIG. 8 and column 2, lines 36-44, which shows a user interface toolkit on the remote client having an event monitor, i.e. a

Art Unit: 2122

component related to user interaction, and an event sender, i.e. for generating events coupled to the monitor in response to user interaction);

(b) providing a remote-capable user interface toolkit on the server by creating a remote-capable component which is configured to interact with the application according to the application programming interface and which is configured to generate a message to the component on the remote client to perform the respective function on the remote client (see slave daemon 247 in FIG. 8 and column 10, lines 56-67, which shows a remote-capable user interface toolkit on the server having an event analyzer component for interacting with an application by way of hooks and window messages, i.e. by way of an application programming interface);

(c) invoking the remote-capable user interface toolkit by the application to perform a function according to the application programming interface (see column 10, lines 56-67 and column 11, lines 13-21, which shows the application invoking the remote-capable user interface toolkit by calling the drawing functions of the application programming interface);

(d) generating the message by the remote-capable component of the remote-capable user interface toolkit on the server in response to the invocation by the application, the message being a command to the user interface toolkit on the remote client to perform the function (see column 11, lines 29-62, which shows generating messages, in the form of drawing commands, to send to the user interface toolkit on the remote client to perform the respective function);

(e) communicating the message between the remote-capable user interface toolkit on the server and the user interface toolkit on the remote client (see column 11, lines 29-49, which shows sending or communicating the drawing command message between the server and the remote client); and

(f) performing the function on the remote client by the component of the user interface toolkit in response to the message (see column 11, lines 50-62, which shows the user interface toolkit performing the function on the remote client in response to the message).

With respect to claim 2 (original), Muta further discloses the limitation wherein the component in the user interface toolkit is configured to render a graphical item and the remote-capable component is configured to generate a message to render the graphical item (see drawing command analyzer 337 in FIG. 8, which shows the component in the user interface toolkit for rendering a graphical item, and drawing command sender 329 in FIG. 8, which shows the remote-capable component for generating the message), and wherein communicating the message between the remote-capable user interface toolkit on the server and the user interface toolkit on the remote client comprises transmitting the message to the user interface toolkit on the remote client to render the graphical item (see column 11, lines 29-49, which shows sending or transmitting the message to render the graphical item).

With respect to claim 3 (original), Muta further discloses the limitation wherein performing the function on the remote client by the component of the user interface toolkit comprises rendering the graphical item on the remote client in response to the message (see column 11, lines 50-62, which shows rendering the graphical item on the remote client in response to the drawing command message).

With respect to claim 4 (original), Muta further discloses the limitation wherein the component in the user interface toolkit is configured to install an event handler and the remote-capable component is configured to generate a message to install the event handler (see column

Art Unit: 2122

9, lines 26-35, which shows activating or installing an event monitor in response to a notice or message from the server, and lines 36-52, which further shows using an event handler), and wherein communicating the message between the remote-capable user interface toolkit on the server and the user interface toolkit on the remote client comprises transmitting the message to the user interface toolkit on the remote client to install an event handler (see column 9, lines 6-17, which shows transmitting the message from the remote-capable user interface toolkit on the server to the user interface toolkit on the remote client).

With respect to claim 5 (original), Muta further discloses the limitation wherein performing the function on the remote client by the component of the user interface toolkit comprises installing the event handler on the remote client in response to the message (see column 9, lines 26-35, which shows activating or installing an event monitor on the remote client in response to the message).

With respect to claim 6 (original), Muta further discloses:

(a) generating an event by the remote-capable component of the remote-capable user interface toolkit in response to the step of invoking (see column 10, lines 56-67 and column 11, lines 13-21, which shows invoking the remote-capable user interface toolkit, and lines 29-62, which further shows generating drawing commands or events to send to the user interface toolkit on the remote client); and

(b) wherein communicating the message between the remote-capable user interface toolkit on the server and the user interface toolkit on the remote client comprises asynchronously transmitting the event to the user interface toolkit (see FIG. 8, which shows asynchronous

communications between the remote-capable user interface toolkit on the server and the user interface toolkit on the client).

With respect to claim 10 (currently amended), the limitations recited in the claim are analogous to those of claim 1 (see the rationale applied to claim 1 above). Muta further discloses a distributed computer system having a server (see slave server 240 in FIGS. 2 and 4) and a remote client (see master controller 210 in FIGS. 2 and 4).

With respect to claims 11, 12, 14 and 15 (original), the limitations recited in the claims are analogous to those of claim 2 (see the rationale applied to claim 2 above).

With respect to claims 13 and 16 (original), the limitations recited in the claims are analogous to those of claim 3 (see the rationale applied to claim 3 above).

With respect to claims 17 and 18 (original), the limitations recited in the claims are analogous to those of claim 4 (see the rationale applied to claim 4 above).

With respect to claim 19 (original), the limitations recited in the claim are analogous to those of claim 5 (see the rationale applied to claim 5 above).

With respect to claim 20 (original), the limitations recited in the claim are analogous to those of claim 6 (see the rationale applied to claim 6 above).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2122

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muta, as applied to claim 6 above, in view of U.S. Pat. No. 6,401,118 to Thomas (art of record; herein "Thomas"), as set forth in the Office action mailed December 29, 2003.

With respect to claim 7 (original), although Muta discloses remotely controlling graphical applications on the server (see column 2, line 55 to column 3, line 4), which includes, for example, database searching applications, Muta does not expressly disclose the limitation wherein the application is a database searching application configured to search a database for information in response to a user-defined request,

(a) wherein the step of generating an event by the remote-capable component of the remote-capable user interface toolkit comprises identifying information from the database in response to the user-defined request; and

(b) wherein the step of asynchronously transmitting the event to the user interface toolkit comprises asynchronously transmitting a message to the remote client to render the information from the database identified in the step of generating an event.

However, Thomas discloses a distributed system comprising a server (see 106 in FIG. 2) and a remote client (see 202 in FIG. 2), wherein the server has an application for searching the World Wide Web, and the remote client has a browser for interacting with the application based on user requests (see column 2, lines 37-51). The system is distributed such that the application

executes on the server and the remote client provides the user interface, thereby allowing greater throughput and availability of the system as a whole (see column 2, lines 61-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Muta and Thomas to improve the throughput and availability of an application, such as the database searching application taught by Thomas, by implementing the application within the distributed server and remote client system disclosed by Muta. The throughput of the system would be further improved by reducing the quantity of data exchanged between the server and the remote client, as taught by Muta (see column 2, lines 15-19).

With respect to claim 8 (original), although Muta discloses remotely controlling graphical applications on the server (see column 2, line 55 to column 3, line 4), which includes, for example, applications such as browsers for searching the World Wide Web, Muta does not expressly disclose the limitation wherein the application is a web browser and wherein the database is the World Wide Web,

(a) wherein the step of identifying information from the database comprises identifying information from the World Wide Web; and

(a) wherein the step of asynchronously transmitting a command to the remote client to render the information from the database comprises asynchronously transmitting a command to the remote client to render the information from the World Wide Web.

However, Thomas discloses a distributed system comprising a server (see 106 in FIG. 2) and a remote client (see 202 in FIG. 2), wherein the server has an application for searching the World Wide Web, and the remote client has a browser for interacting with the application based on user requests (see column 2, lines 37-51). The system is distributed such that the application

executes on the server and the remote client provides the user interface, thereby allowing greater throughput and availability of the system as a whole (see column 2, lines 61-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Muta and Thomas to improve the throughput and availability of an application, such as the database searching application taught by Thomas, by implementing the application within the distributed server and remote client system disclosed by Muta. The throughput of the system would be further improved by reducing the quantity of data exchanged between the server and the remote client, as taught by Muta (see column 2, lines 15-19).

12. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muta, as applied to claim 1 above, in view of U.S. Pat. No. 6,011,918 to Cohen et al. (art of record; herein "Cohen"), as set forth in the Office action mailed December 29, 2003.

With respect to claim 9 (currently amended), although Muta discloses substituting the normal flow of the graphics engine and display driver, i.e. the portion of code relevant to executing the function, with a component that issues drawing commands to the remote client to execute the respective function (see column 11, lines 7-12), Muta does not expressly disclose the limitation wherein the step of providing a remote-capable user interface toolkit on the server further comprises:

(a) providing a code-generating computer program configured to read in the code of the component of the user interface toolkit and to generate the remote-capable component of the remote-capable user interface toolkit by substituting at least one portion of the code relevant to

executing the function with at least one portion of code configured to issue a remote command to execute the function;

(b) reading in the code of the component of the user interface toolkit;

(c) generating the remote-capable component of the remote-capable user interface toolkit by copying the code of the component and by substituting said at least one portion of the code relevant to executing the function with said at least one portion of code configured to issue the remote command to execute the function.

However, Cohen discloses generating code automatically to distribute an application between a server and a remote client, by reading the code and substituting the components and functions with a remote-capable configuration (see column 3, lines 11-43), in order to support a plurality of computing topologies without requiring the distributed system to be redesigned in each case (see column 2, lines 62-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to supplement the distributed server and remote client system of Muta with the code generating features taught by Cohen, in order to enable support for a plurality of computing topologies without requiring the distributed system to be redesigned in each case.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

Art Unit: 2122

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Yigdall whose telephone number is (703) 305-0352. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael J. Yigdall
Examiner
Art Unit 2122

My

mjy


TUAN DAM
SUPERVISORY PATENT EXAMINER